

In the Claims

1-12. Cancelled.

13. (New) A network switch comprising:

a look-up engine operative to retrieve a port bitmask in response to a header portion of a received packet and to forward the received packet only in response to receiving a modified port bitmask;

a network processor operable to perform a processing function, in response to at least one of said received packet and said port bitmask, to generate the modified port bitmask and to provide the modified port bitmask to the lookup engine.

14. (New) The network switch according to claim 13 wherein each of said lookup engine and said network processor receive a first indication that the packet has been received.

15. (New) The network switch according to claim 13 wherein said look-up engine provides for said network processor a second indication, said second indication indicating that said port bitmask has been obtained.

16. (New) The network switch according to claim 13 wherein said network processor is operative, in response to said first indication, to execute said processing function and to provide to said look-up engine a third indication, said third indication indicating that said processing function has been executed.

17. (New) The network switch according to claim 13 wherein said network processor performs the processing function in parallel with the retrieving by the lookup engine.

18. (New) The network switch according to claim 16 wherein the lookup engine forward a plurality of copies of the received packet, each of the plurality of copies in response to one of a plurality of modified port bitmasks provided by the network processor.

19. (New) The network switch according to claim 16, wherein the lookup engine retrieve a port bitmask for a next received packet only after receiving said third indication.

20. (New) The network switch according to claim 16 wherein said third indication is said modified bitmask.

21. (New) The network switch according to claim 18 wherein said third indication is sent based on a value of a replication pointer.

22. (New) A network switch comprising:

receive memory operable to provide a first indication to both lookup hardware and a network processor, said first indication indicating that a received packet is stored in the receive memory;

look-up hardware operable, in response to the first indication, to retrieve data associated with the received packet and further operable to forward the received packet only in response to receiving modified data associated with the received packet;

a network processor operable to perform a processing function, in response to at least said first indication, to generate the modified data associated with the received packet and to provide the modified data to the lookup hardware.